

Impact of Auxiliary Labeling on Prescription Bottles in the Community Pharmacy Setting

Sylvia Jackson*, David Seal, Amanda Hirsch, Brea Parks, Samantha Sparks and Tameka Williams

College of Pharmacy and Pharmaceutical Sciences, Florida A&M University, Florida 32307, USA

Abstract

Many community pharmacies apply auxiliary labels to prescription bottles in an effort to notify patients of important facts and information associated with the medication(s) they are taking. These auxiliary labels vary in color and message. Unfortunately, despite these brightly colored labels many patients disregard them or do not take the time to read, understand, or inquire about their messages and importance. This has been and is becoming a serious prescription problem. Simply reading and adhering to various auxiliary labels can and will help to decrease medication errors. Increasing patient awareness of the information on the auxiliary label(s) can potentially decrease fatalities associated with taking the wrong medications. Studies have shown that the problem with the auxiliary labels is not only related to disregarding them, but is heavily related to patients having low health literacy, meaning they simply do not understand what the auxiliary label is portraying to them. As health care professionals, it is our duty to help patients read, understand, and adhere to these auxiliary labels. This increase in patient awareness could potentially help significantly reduce medication errors and medication misuse associated fatalities. Based on the research conducted, it was found that patients read their prescription labels for the first fill of a medication, but do not read the prescription label for a refill. Most patients do not recognize several warning labels that they were asked to review. Patients did understand the directions and caution labels on their prescription bottles and realized that prescription warning labels are important for their safety. When questions arise about prescription and non-prescription medications the majority of patients would consult their pharmacist. Overall, pharmacists play a key role in making sure that patients know pertinent information in order for them to take the medication correctly and safely.

Introduction

The under use of auxiliary labels is becoming a growing and troublesome epidemic linked to medication related problems. The proper use of these labels can serve to decrease these associated medication related problems. In this study the use and underuse of the auxiliary labels will be assessed, as well as possible ways to rectify this problem. These problems will be addressed using a standardized voluntary questionnaire completed by patients in community pharmacy settings. After gathering the data, the findings will be used to help formulate ways to decrease this growing epidemic. One of the main causes for this epidemic is low health literacy among the prescription medication users. The key to improvement of this problem would be to take time to interact with patients individually before they leave the pharmacy, if feasible, and if not attempt to set up another method or time for discussion. Communication would be the ultimate problem solver of this auxiliary labeling issue [1,2].

Body

Questionnaires were formulated and completed voluntarily by patients of various ages over the age of 18 picking up prescriptions in different areas of a large metropolitan area of north Florida, with a population of just under one million. The research was conducted by four separate researchers; each was responsible for obtaining at least 20 completed surveys. The questionnaires were completed after the patient received his or her prescription(s) at different community pharmacy settings in at least ten different zip codes in the north Florida area. No additional training of the researchers was needed to administer these voluntary patient questionnaires. After all questionnaires were collected, the data was compiled and recorded and double checked by two other researchers.

No exclusion criteria are indicated due to the population size needed and for the interest of power to be obtained at the end of the study. The inclusion criteria includes, patients 18 years and older,

ability to give consent, ability to read and understand survey questions and the patient has to be picking up a prescription medication at a community pharmacy setting. The questionnaire includes consent from the patients indicating that they are completing the survey voluntarily and that they can withdraw from the survey at any time for any reason. All surveys will be completed anonymously and will not have any patient identifiers attached to the data.

Methodology: Survey

Results

The data from this study found that the majority of patients read their prescription labels for the first fill of a medication, but do not read the prescription label when they pick up a refill (Figures 1-4).

It was found that the patients from this study do not follow directions and warnings on their prescription labels, however they do recognize several warning labels that they were asked to review on the survey. Overall, the patients understand the directions and caution labels on their prescription bottles and realize that prescription warning labels are important for their safety.

***Corresponding author:** Dr. Sylvia Jackson, Associate Professor, Jacksonville Pharmacy Practice, College of Pharmacy and Pharmaceutical Sciences, Florida A&M University, Florida 32307, USA, Tel: 904-391-3904, E-mail: sylvia.jackson@fam.u.edu

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Consent

Do you agree with the following statements?

This survey is **anonymous** and will **not** have any of my information attached to any of the answers provided.

If at any time I feel that I do **not** want to complete the survey I will withdraw.

Circle one option: **Yes or No**

Demographics

Age Range (circle one option): **a.** 18 – 30 **b.** 31 – 50 **c.** 51 – 70 **d.** 71 – 90
e. 91 or older

Sex (circle one option): **a.** Female **b.** Male

Highest Education Level Completed (circle one option):

a. Some High School, **no** diploma **b.** High School graduate, or equivalent (GED)
c. Some college, **no** degree **d.** Technical/Trade Training **e.** Associate's Degree
f. Bachelor's Degree **g.** Master's Degree **h.** Professional Degree **i.** Doctorate Degree

Ethnicity (circle one option): **a.** Caucasian **b.** African American **c.** Hispanic or Latino
d. Native American or American Indian **e.** Asian **f.** Other

Zip Code (write it in):

Please answer ALL of the following questions to the best of your ability.

1. What pharmacy do you fill your prescription medications at regularly?

a.CVS **b.** Walmart **c.** Publix **d.** Winn-Dixie
e. Walgreens **f.** Target **g.** Rite-Aid **h.** K-mar **i.** Other

2. Do you read the prescription bottle label completely when you pick up the first fill of a new medication?

Circle one option: **Yes or No**

3. Do you read the prescription bottle label when you pick up every refill?

Circle one option: **Yes or No**

4. Do you recognize any of the labels below from your prescription bottles?

Circle one option: **Yes or No**



Circle **ALL** the labels to the left that you have seen on your prescription bottle labels.

6. Do you understand the directions and caution labels on your prescription bottles?

Circle one option: **Yes or No**

7. When you read the labels do you follow the directions and warnings?

Circle one option: **Yes or No**

8. When you have questions about your prescription medications who do you contact most often?

Circle one of the following: **a.** Doctor **b.** Pharmacist **c.** Family member
d. Internet **e.** Other

9. When you pick up your prescription(s) are you offered counseling from the pharmacist?

10. When you accept counseling from the pharmacist about your prescription(s) do you find it to be helpful?

Circle one option: **Yes or No**

11. Overall, do you think the prescription warning labels are important to your safety when taking prescription medications?

Circle one option: **Yes or No**

Thank you for your participation! 😊

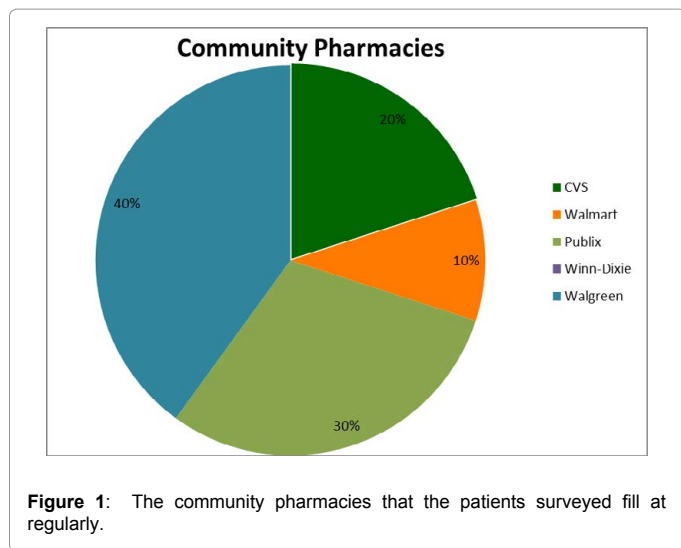


Figure 1: The community pharmacies that the patients surveyed fill at regularly.

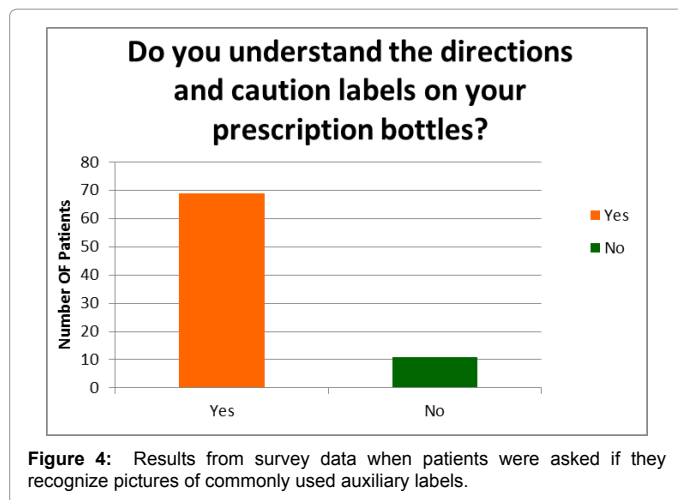


Figure 4: Results from survey data when patients were asked if they recognize pictures of commonly used auxiliary labels.

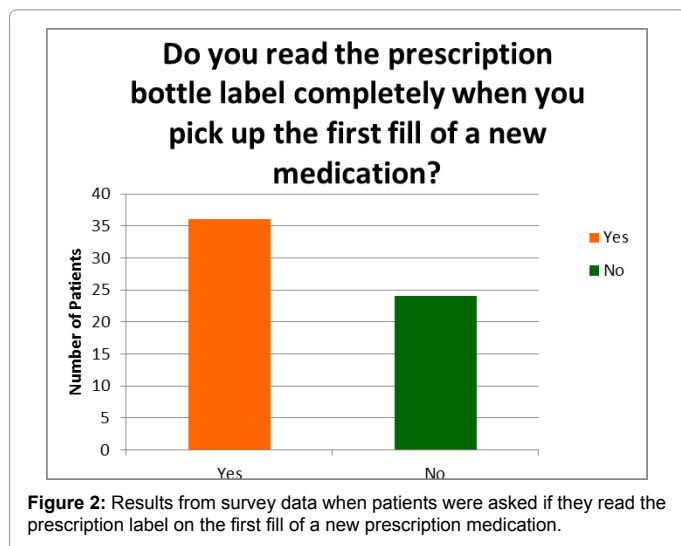


Figure 2: Results from survey data when patients were asked if they read the prescription label on the first fill of a new prescription medication.

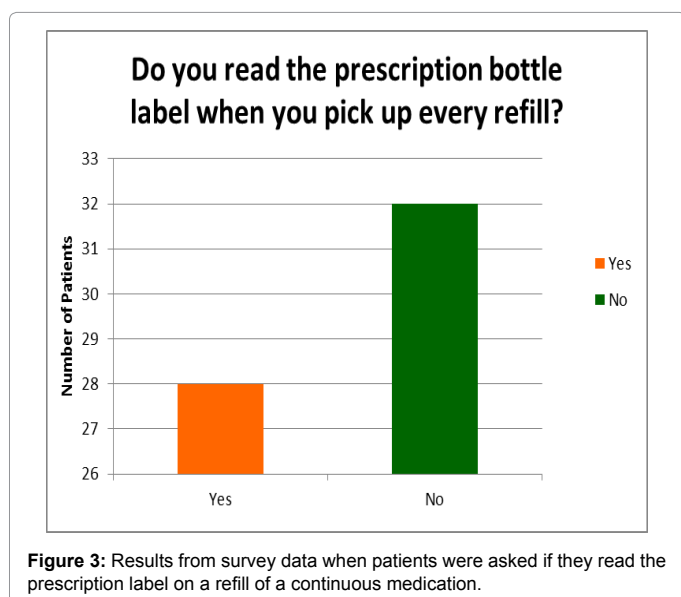


Figure 3: Results from survey data when patients were asked if they read the prescription label on a refill of a continuous medication.

Discussion

Auxiliary labels are applied to prescription bottles in an effort to notify patients of important information regarding their medications. Many patients recognize the auxiliary labels but do not adhere to them. When questions arise about prescription and non-prescription medications the majority of patients consult their pharmacist.

Based on the research that was conducted we concluded that the majority of patients: Read their prescription labels for the first fill of a medication, DO NOT read the prescription label when they pick up a refill, DO NOT follow directions and warnings on their prescription labels, Did recognize several warning labels that they were asked to review, Understand the directions and caution labels on their prescription bottles. Patients do realize that prescription warning labels are important for their safety [3-10].

Conclusion

Pharmacists play a key role in making sure that patients know pertinent information in order for them to take the medication correctly and safely. For the use of auxiliary labels, the patients must be counselled on the first fill of a medication and if there are any changes to the prescription. Pharmacists are the most trusted profession, so counselling should always be offered to uphold this high reputation pharmacists have.

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